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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,968	09/20/2006	Vincent George McCarthy	1000035-000071	5903
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EXAMINER SWINEHART, EDWIN L.				
ART UNIT 3617		PAPER NUMBER		
NOTIFICATION DATE 05/07/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

**Office Action Summary****Application No.**

10/574,968

**Applicant(s)**

MCCARTHY ET AL.

**Examiner**

Ed Swinehart

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**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14, 16-30 and 32-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-30 and 32-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claim 57 is objected to because of the following informalities: The claim as drafted is somewhat confusing as it recites the hollow bodies a multitude of times, yet their relationship to each other is unclear. Are the hollow bodies of claim 1 the same as the hollow bodies of claim 55? Appropriate correction is required.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 61 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 61 as presented is unclear. Claim 61 sets forth a range within a range. Such is further confusing, as the two ranges are the same.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-11,17,18,20,26,28,36,44,48 and 55-57 and 62 are rejected under 35 U.S.C. 102(b) as being anticipated by Douglas.

Douglas discloses the claimed invention, including a plurality of submerged hollow cylindrical bodies. The bodies are suspended by cables/lines 12 inherently possessing the tension/compression relationship as claimed. Each body is a ballast

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tank, as they employ water to steady the vessel. Pivotal projecting fins **316** are provided, and provide for more resistance in one direction. Douglas mentions the submergence of the bodies, and will inherently at time be submerged to rolling of the vessel and heavy seas.

Re claim 42, the suspending means are interconnected at the mast top.

6. Claims 1,9-11,15,16,25,26-28,30-32,41,44,47,58 and 62 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayward.

Hayward provides a plurality of suspended ballast tanks, each divided into separately ballastable compartments. Such ballast tanks are completely submerged when being filled with water, and are further shown completely submerged in figure 6. "Saddles" **34** are provided.

7. Claims 1-3,9-12,24,27,28,36,39,40,41 and 62 rejected under 35 U.S.C. 102(b) as being anticipated by Imaizumi.

Imaizumi provides chain suspended partially hollow conical bodies. A saddle is provided at **7**.

Re claim 62, "comprising..." is apparatus, carrying no weight in this method claim. Furthermore, "closable" fails to define over the pans/tanks of Imaizumi, as such are inherently capable of being closed.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4-8,13,14,29,30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imaizumi.

The number of stabilizers employed, as well as their specific location about the hull as well as the size thereof is considered to have been an obvious consideration of design, well within the level of skill of the ordinary routineer working in the art at the time of the invention, providing expected results.

10. Claims 13,14,19,21-23,29-30,33-35,37-39,42,43,45,46,49-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Douglas.

The size and volume of the tanks of Douglas, as well as the shape thereof is considered to have been an obvious design consideration, well within the level of skill of the ordinary routineer working in the art, providing expected results.

Re claim 12, chain is considered to have been an obvious equivalent to cable or wire, and therefore it would have been obvious to the ordinary routineer working in the art at the time of the invention to suspend the tanks of Douglas with chain. Such would have been obvious to try, and would have yielded expected results.

11. Claims 12 and 59-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayward.

Re claim 12, chain and cable as far as functioning as a tension member is concerned, is considered to have been old and well known in the marine environment, and substitution of one for the other would have been well within the level of skill of the ordinary routineer working in the art at the time of the invention, providing expected results.

Re claim 59, the ballast tanks of Hayward are suspended by cables, which will inherently provide the ratio of tension to compression loading as claimed.

The size and volume of the tanks of Hayward, as well as the shape thereof is considered to have been an obvious design consideration, well within the level of skill of the ordinary routineer working in the art, providing expected results.

12. Applicant's arguments filed 2/8/2008 have been fully considered but they are not persuasive.

Applicant argues that the or each, body of Douglas is not fully submerged below the water line of the vessel.

The examiner contends that in use, such chambers of Douglas will become completely submerged at times due to rolling of the vessel. Applicant concedes this in his arguments when it is stated: "Applicants note that although one of the buckets in Douglas may be fully submerged during motion of the boat, if both buckets remain submerged they would not be able to fill and empty as required." There is nothing in the claims to define over such a transient condition, when one of the chambers of Douglas becomes submerged.

Applicant further argues that the "buckets" of Douglas are not ballast tanks, i.e. buoyancy chambers.

The buckets of Douglas function as ballast, and are therefore ballast tanks. There is nothing in the definition of "ballast tank" to require such to also be able to become buoyant. The claims do not recite a condition in which the tanks are buoyant.

Applicant argues that Hayward fails to show each body fully submerged below the waterline.

The examiner is at a loss to understand how such a conclusion can be made with respect to Hayward. Hayward specifically mentions that his ballast tanks are fully submerged when being filled with water, and they are later raised to the position shown in figure 2. Furthermore, figure 6 illustrates a complete submergence of the ballast tanks.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ed Swinehart whose telephone number is 571-272-

6688. The examiner can normally be reached on Monday through Thursday 6:30 am to 2:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ed Swinehart/  
Primary Examiner  
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